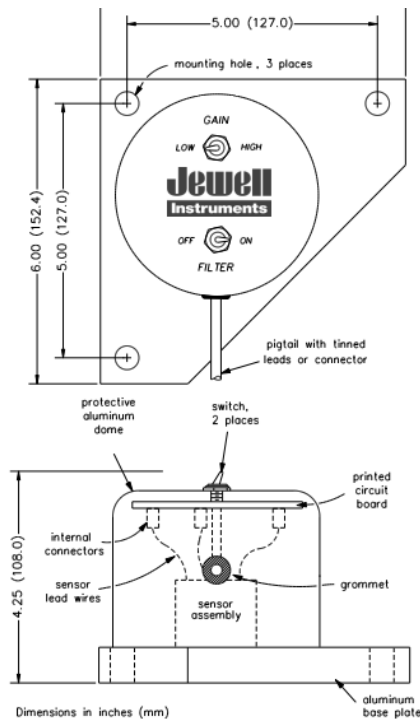


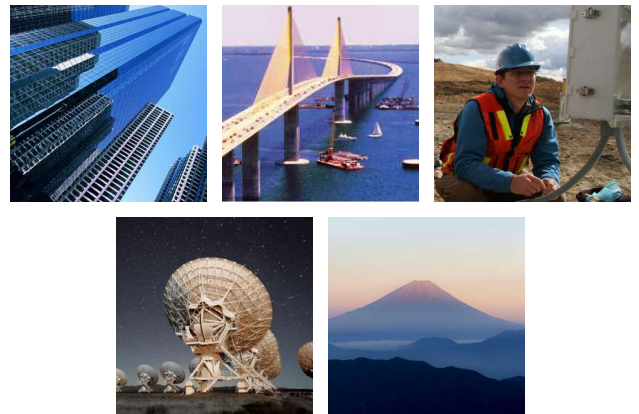
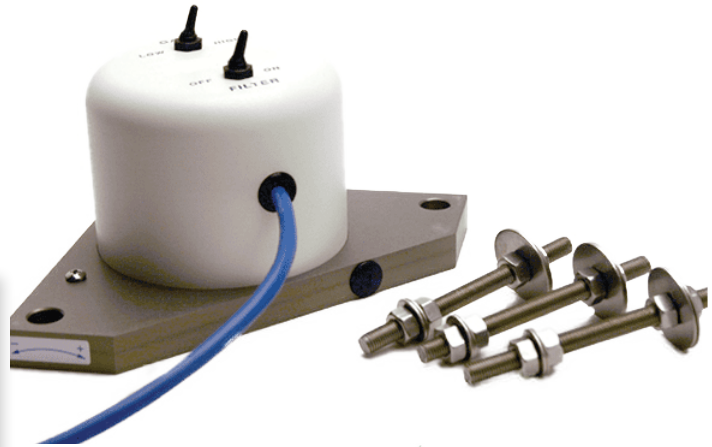
## A711-2, A716-2

### Floor-mount & Wall-mount Tiltmeter

The model A711-2 (floor-mount), and A716-2 (wallmount) bolt or clamp to any surface, and are well suited for areas with heavy traffic or vibration. Electronic performance is identical to the model A701-2. Units include two switchable gains and two low-pass filter settings, and are sensitive to  $<0.1$  urad. Output is a stable  $\pm 8$  DC voltage ( $\pm 16$  VDC differential). Applications include volcano monitoring, high-precision geotechnical engineering, bridge deflection monitoring, precision metrology, radar platform leveling, and high-accuracy tilt monitoring applications where bolt-on installations are required.



Dimensions: in [mm]



#### APPLICATIONS:

- Volcano monitoring
- Geotechnical engineering
- Bridge deflection monitoring
- Precision metrology
- Radar platform leveling

# PERFORMANCE SPECIFICATIONS

## PERFORMANCE

VERSION		Type-A (High-Gain)	Type B (Mid-Range)
LINEAR RANGE (°) <sup>1</sup>	HIGH-GAIN: LOW-GAIN	±0.046° ±0.46°	±0.8° ±8.0°
SCALE FACTOR	HIGH-GAIN: LOW-GAIN	0.1 μradian/mV 1 μradian/mV	0.1°/V 1°/V
NONLINEARITY (%FRO) <sup>2</sup> max	HIGH-GAIN: LOW-GAIN	0.2% 2%	0.2% 1.5%
NONREPEATABILITY		1 μradians (static)	2 μradians (static)
RESOLUTION		0.1 μradians	1.0 μradians
TIME CONSTANT		Filter on: 7.5 sec; Filter off 0.5 sec	Filter on: 7.5 sec; Filter off 0.4 sec
K <sub>z</sub> TEMP COEFFICIENT (°/°C)		±3 μradians/°C (typical)	±0.001°/°C (typical)
K <sub>s</sub> TEMP COEFFICIENT (%/°C)		0.05%/°C (typical)	
OUTPUT		±8VDC (single ended); ±16VDC (differential)	
CHANNELS		X-tilt, Y-tilt, Temperature	

## ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	0.1 °C/mV typical (single ended; 0 °C = 0mV)
POWER	±11 to ±15 VDC @ +11 and -6mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-25° to +70 °C
STORAGE TEMPERATURE RANGE	-30° to +100 °C
WEIGHT	3 lb (1.4 kg)
MATERIALS	Anodized and painted aluminum
CABLE	3m (10 ft) multiconductor cable + overall shield, PVC jacket, connectors included

## PIN OUT:

CONNECTOR	FUNCTION
RED	+12 TO +15V PWR
BLACK	PWR GND
VIOLET	-12 TO -15V POWER
BLUE	+Y-TILT OUT
BROWN	-Y-TILT OUT
GRAY	-X-TILT OUT
GREEN	+X-TILT OUT
WHITE	SIG GND
YELLOW	TEMP OUT

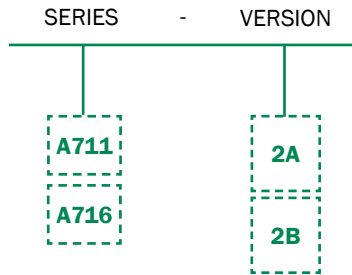
### NOTES:

1. Custom ranges available on request
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development

# ORDERING INFORMATION

**HOW TO ORDER** Model Numbers are comprised of the series, the number of axes, and the angular range.



MODEL #	PART #
A711-2A	98711-01-ROHS
A711-2B	98711-02-ROHS
A716-2A	98025-01-ROHS
A716-2B	98025-02-ROHS

## Accessories:

PART #	DESCRIPTION
01456	Compact Mounting Plate for Model 711 Type Tiltmeters, 6.0 x 7.5 x 0.375 inches
01224-01	Horizontal Mounting Plate for Model 711 Type Tiltmeters, 8.5 x 9.0 x 0.5 inches
01157-01	Vertical Mounting Bracket for Model 711 Type Tiltmeters, L-bracket style
70304	Power/Signal Cable, 10-conductor, 24 AWG, Polypropylene Jacket: 500, 700 & 800 Series Dual Axis Tiltmeters, price per ft.
89062	Extra RS422 Test Cable, 6-ft (1.8 m) for use with D701 and D711 Digital Tiltmeters
89063	Extra RS232 Test Cable, 6-ft (1.8 m) for use with D701 and D711 Digital Tiltmeters
00254-02	Transformer, 100-240 VAC to 12VDC, Single-ended, for Analog and Digital Tiltmeters

850 Perimeter Road Manchester, NH 03103 USA

SENSORS: 800.227.5955

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